

XXV.—Contributions to an Insect Fauna of the Amazons Valley.

COLEOPTERA: LONGICORNES. By H. W. BATES, Esq.

[Continued from vol. xiv. p. 24.]

GENUS CARTERICA, Pascoe.

Pascoe, Trans. Ent. Soc. Lond. iv. (1858) p. 250.

With this genus commence the more elongated and narrow forms which distinguish the typical Colobotheinæ. The elytra are nearly parallelogrammic, especially in the male sex; in the females slightly dilated a little before the apex. The head is somewhat narrow, and the bases of the antennæ rise from distinct antenniferous tubercles. The antennæ are greatly elongated, and, from the third joint, very slender—the basal joint being longer than the third, and thickened from the base to near the apex. The prothorax is rather short, much narrower at the base than the elytra, and its widest part is at some distance from the base, where it forms, on each side, an obtuse prominence. The humeral angles of the elytra are prominent, and a distinct, but not polished, ridge proceeds from them towards the apex; the surface of the elytra is ribbed, and the apex is truncate, with the outer angle alone prominent and dentiform. The sternums are narrow and plane. The abdomen is slender and tapering, and the terminal segment elongated, especially in the female. In *C. cinctipennis* the ventral plate of the female is subtubular and truncated at the apex, the dorsal obtusely rounded: in the male the dorsal plate is notched at the apex; in *C. cincticornis* the apical segment is shorter and obtuse at the apex. The legs are slender, the basal joint of the tarsi much elongated: the fore tarsi are simple in both sexes.

1. *Carterica cinctipennis*, Pascoe.

Carterica cinctipennis, Pasc. Tr. Ent. Soc. Lond. iv. 1858, p. 250.

C. colobothoides, Thomson, Classif. des Cérambycides, p. 19 (1860), sec. Chevrolat, Journ. Ent. i. 188.

C. ochraceo-fulva, vertice vittis duabus, thorace vitta lata mediana alteraque angustiorie lateral usque ad oculos extensa, pectoris lateribus, femoribus tarsisque apice, tibiis et antennis nigris, his articulis intermediis basi piceis: elytris nigris, utrinque tricostatis macula humerali margineque fulvis, pone medium fascia testacea ad suturam interrupta. Long. $4\frac{1}{2}$ –6 lin. ♂ ♀.

Mr. Pascoe described this as a new species, believing it, after careful examination, to be distinct from the *S. mucronata* of Olivier, a species closely resembling it; but Prof. Gerstaecker, in the Berlin 'Bericht' for 1858 (p. 117), believes the two to be the same, "the description of Olivier being much more indicative than his figure." It is a generally distributed insect

throughout the Amazons region. I did not find it on timber, but on the leaves of trees in the forest.

2. *Carterica cincticornis*, n. sp.

C. minor, modice elongata, depressa, setosa, nigra; capite (occipite excepto), vitta lata laterali thoracis, macula parva humerali femorumque basi fulvo-testaceis; antennarum articulo quarto late testaceo annulato, primo infra ciliato; elytris pone medium paulo ampliatis, apices versus leviter attenuatis, supra grosse punctatis, bicostatis. Long. 2-3 lin. ♂.

Head short, forehead convex, tawny testaceous; antenniferous tubercles and two broad stripes behind them, united on the occiput, black. Antennæ twice the length of the body, black, the fourth joint, with the exception of the apex, pale testaceous; clothed with short setæ, the basal joint furnished beneath with a fringe of long hairs. Thorax scarcely convex, lateral prominences placed at a short distance from the base; black, with a silky fulvous vitta on each side. Elytra depressed, shoulders obtuse, lateral carina proceeding thence prominent, but not visible from above, slightly dilated from the middle to near the apex, then more suddenly attenuated, apex sinuate-truncate with the sutural angle rounded and external angle produced into a stout tooth; surface clothed with erect brown setæ, coarsely punctured, except near the apex, and traversed by two faintly elevated costæ, both of which disappear before reaching the apex. Prosternum reduced to a very narrow thread; mesosternum also extremely narrow. Abdomen blackish, clothed with grey pile. Legs moderately slender, basal joint of the posterior tarsi a little longer than the remaining joints taken together; black; coxæ and basal halves of the thighs tawny testaceous.

Eggs, rare. I met with two examples only of this pretty little species: its habits are probably very similar to those of *C. cinctipennis*, it being found only on the leaves of trees in the shades of the forest. The depressed body, somewhat dilated elytra, and fringed basal joint of the antennæ are so many points of approximation to the genus *Sparna* of Thomson (*Systema Cerambycidarum*, Liège, 1864, p. 30), the species of which resemble the dilated forms of the family Lycidæ.

Genus COLOBOTHEA, Serville.

Serville, Ann. Soc. Ent. Fr. 1835, p. 69.

The typical forms of this genus are well known to all who occupy themselves with the study of exotic Coleoptera. They are known by their elongate, narrow, and compressed form of body—the vertical, deflexed sides of the elytra being separated from the dorsal surface by an elevated line, which proceeds from

the ridge formed by the shoulders, and disappears before reaching the apex. The elongated basal joint of the antennæ has the same outline as in the great body of the *Acanthocinitæ* previously described. The anterior coxæ are somewhat globular, and the acetabular suture is quite closed; both pro- and meso-sterna are plane, the former being very narrow and the latter subquadrate, narrowed behind. The apical segment of the abdomen is not prolonged into an ovipositor in the female; it varies so much in form in the two sexes, especially as to the outline of the apices of the ventral and dorsal plates, that it affords no constant characters for the formation of groups within the genus. The males are larger and more robust than the females, the anterior legs also being longer and stouter, and having dilated and fringed tarsi. In these typical forms the body is somewhat depressed above, with a very gradual and slight slope posteriorly; with this the elytra are narrowed nearly in a uniform degree from base to apex, and the thorax is widest at its hind angles, with a gradual attenuation from its base to its apex.

These characters, however, do not hold together so as to form a well-defined genus. Some species, which in all other respects are true *Colobothææ*, recede from the typical forms in the shape of the thorax. Thus *C. Schmidtii* has a thorax approximating to that of some members of the *Leiopodine* group, having a lateral tubercle towards the hind angles; and *C. lineola* presents a thorax of nearly the same form as *Edopeza*, *Trypanidius*, and the allied genera. The dilatation of the male tarsi also fades away from species to species, and some of these aberrant forms have the elytra less depressed and more narrowed near their apices than in the more typical *Colobothææ*. Notwithstanding this diversity, I have failed in my attempts to divide the genus. One of the aberrant forms constitutes the genus *Priscilla* of Thomson (*Systema Ceramb.* p. 30). It is much less elongate and more convex than the true *Colobothææ*, and the shoulders of the elytra form a larger and more elevated ridge; I have not ventured, however, to separate it from the rest whilst many other species equally entitled to form distinct genera remain in the genus.

§ I. Fore tarsi not more dilated in the male than in the female. Thorax narrowed at the base, and tumid or tuberculated behind the middle on each side.

1. *Colobothæa lignicolor*.

C. modice elongata, brunnea cinereo nigroque variegata, corticis fragmentum simulans; elytris apices versus subito attenuatis, apicibus minus late sinuato-truncatis utrinque bispinosis, dorso costatis. Long. 6 lin. ♀.

Head clothed with tawny-brown pile. Antennæ twice the

length of the body (♀), brown, bases of the joints pale ashy, basal joint ringed with ashy. Thorax widened from the front to the lateral tubercles, which are short and acute, then strongly attenuated and incurved to the base; surface convex, varied with light and dark brown, and with two black vittæ each interrupted in the middle; side, below the tubercle, black, shiny. Elytra short for this genus, broad at the base, gradually attenuated to near the apex, thence suddenly attenuated, making the truncated apex narrow; sutural spine short, external one elongated; shoulders advanced and rounded, lateral carina strongly pronounced and polished, deflexed sides coarsely punctured and with a smooth carina; surface longitudinally convex, setose, and punctured; two short, rugose, slightly elevated carinæ near the base, and one longer and smoother along the disk; the colour is brown varied with ashy, near the scutellum is a dull blackish patch, and behind the middle is an oblique black streak; the anterior part of the disk is ashy, and there is a triangular ashy spot near the apex. Body beneath black, with grey pile; a row of ashy spots on each side the abdomen. Legs shining pitchy red, spotted with grey.

♀ Terminal ventral segment broadly and triangularly excised, angles prolonged into acute spines. Dorsal segment broadly truncated.

On a bough of a dead tree, forest, Ega. There is a closely allied and similarly coloured species found at Cayenne*.

2. *Colobothea velutina*, n. sp.

C. elongata, parallela, convexa, antice et postice declivis, thorace velutino-nigro vitta laterali fulva; elytris griseis fulvo nigroque maculatis, regione scutellari, maculis lateralibus duabus undulatis plagaque quadrata apicali purpureo-nigris carneo-fulvo cinctis. Long. 6-7 lin. ♂ ♀.

Head brown, a fine central line on the vertex and a broad stripe down each cheek tawny ashy. Antennæ one-third longer

* *Colobothea lignicola*. Parum elongata, angustata, brunnea, cinereo nigroque varia, corticis fragmento simillima. Caput piceo-fuscum. Antennæ piceæ, articulis basi cinereis. Thorax cinereo-fuscus, vittis duabus nigris, lateribus nigris politis; convexus, prope basin sinuato-attenuatus, tuberculis lateralibus obtusis. Elytra brevia angustata, apices versus citius attenuata, apicibus sinuato-truncatis angulis suturalibus distinctis exterioribus productis; supra grosse punctata, prope basin et disco breviter costata, brunneo cinereoque varia, vitta brevi suturali maculaque discoidali (lineola cinerea divisa) saturationibus. Corpus subtus nigrum politum, cinereo varium, abdomine lateraliter cinereo maculato: pedibus piceo-rufis, griseo maculatis. Fœminæ segmento ultimo ventrali attenuato, apice sinuato-truncato bispinoso; dorsali apice rotundato, medio unidentato. Long. 3½ lin. ♀. *Hab.* in Cayenna, a Dom. Bar lecto.

than the body, black (dark red towards the base), the fourth joint with a grey, the sixth with a white ring. Thorax with a distinct tubercle standing out from each side at a short distance from the base, scarcely narrowed behind the tubercle, hind angles slightly prominent; surface velvety purplish black, with a tawny-ashy stripe on each side having a blackish line in its middle, sides below this with a shining black stripe. Elytra moderately elongate, and scarcely tapering from their base to near their apex, whence they are distinctly narrowed to the apex, the latter broadly truncated, the sutural angle of the truncature scarcely distinct, outer angle produced into a longish and acute tooth; the surface is convex, setose, and moderately punctured, partly in rows; the colour is grey sprinkled with blackish spots, and ornamented with large purplish-black patches—namely, one semi-circular, over the scutellum, a second angular, on the side near the base, a third of zigzag outline, beyond the middle, and a fourth quadrate, close to the apex; all these spots are margined with pinkish tawny, but the apex is narrowly edged with grey. Body beneath tawny; abdomen grey in the middle and spotted with black on the sides, the apical segment shining black with two basal greyish spots. Legs black, with grey and tawny-grey rings; fore tarsi simple in both sexes, but the legs of the male are visibly stouter than those of the female.

♂ ♀. Terminal ventral segment sinuate-truncate, angles produced into short and not very acute spines: dorsal segment obtuse. The whole segment is much longer in the female than in the male.

Common on felled trees in the forest throughout the Amazons region. Also taken at Cayenne. An allied but quite distinct species is found in Venezuela*.

3. *Colobothea decemmaculata*, n. sp.

C. elongata, angustata, postice flexuoso-attenuata, carneo-cinerea maculis oblongis lateralibus nigro-velutinis læte ornata: thorace

* *Colobothea maculicollis* (Chevrol. MS. sec. Dom. Deyrolle). Elongata, parallela, modice convexa. Caput sordide cinereum. Antennæ vix corpore longiores (♀?), fuscæ, articulis 4^{to} 6^{to} 8^{vo} et 9^o cinereo annulatis. Thorax paulo ante basin tuberculo majore conico armatus, sordide cinereus (lateribus inclusis), medio dorsi macula oblonga velutino-purpurea ornato. Scutellum velutino-purpureum, medio macula parva cinerea. Elytra imprimis paulo, apices versus citius attenuata, flexuoso-truncata, angulis suturalibus nullis, exterioribus spinosis; supra punctata, grisea, fusco maculata, utrinque maculis majoribus velutino-purpureis tribus ornata, prima parva laterali ante medium, secunda magna triloba pone medium, tertia obliqua valde angulata ante apicem, totis carneo-fulvo partim marginatis. Corpus subtus fulvo tomentosum, abdomine nigro lateribus fulvo maculatis. Pedes nigri, fulvo annulati. Fœminæ (?) segmento ultimo ventrali truncato angulis vix productis, dorsali obtuso. Long. 5½ lin. *Hab.* Venezuela. *Coll.* Bates.

utrinque paulo ante basin tumido, deinde paulo constricto; pedibus rufis, griseo annulatis. Long. $5-6\frac{1}{2}$ lin. ♂ ♀.

Head reddish, cheeks and vertex each with a pinkish-ashy stripe. Antennæ one-fourth longer than the body, dark red, becoming blacker towards the apices and greyish at the bases of the joints. Thorax widened from the front to a short distance from the base, where it is tumid on each side and after that constricted; surface pinkish ashy (the tomentum very compact), each side occupied by a broad velvety-black vitta, below this is a pinkish-ashy stripe succeeded by another black one. Scutellum pinkish tawny. Elytra elongated and tapering from base to apex, but appearing to have a flexuous outline, from the great prominence, after the middle, of a raised line which runs along the deflexed sides very near to the extreme margin; apex obliquely sinuate-truncate, sutural angles prominent, external angles produced into a long spine; the lateral carina proceeding from the prominent shoulders runs in a strongly flexuous course to near the apex; surface punctured, pinkish grey, and ornamented, on each elytron, with four rich velvety-black spots, namely, one triangular in the middle of the base, a second long and oblique, stretching from under the shoulder to the disk of the elytron, a third, angulated, behind the middle, and a fifth, oblique, near the apex, all margined with pinkish tomentum. Body beneath blackish, clothed with grey pile; breast red. Legs red, ringed with grey; fore tarsi simple in both sexes.

♂ Terminal ventral segment with a broad triangular excision, angles acute; dorsal segment obtuse, narrowly notched in the middle.

♀ Terminal ventral segment with a deep semioval excision, angles acute but not produced; dorsal segment with a broad notch in the middle.

This extremely beautiful species was rare. I met with it only at Obydos and on the banks of the Tapajos. It is found in Cayenne, and I have adopted the MS. name under which it exists in some collections in Paris.

4. *Colobothea flavomaculata*, n. sp.

C. parva, angustata, postice attenuata, purpureo-nigra; capite lineis tribus, thorace lineolis transversis lateralibus alteraque dorsali, elytris maculis sex apiceque sulphureis. Long. $3\frac{1}{2}-4$ lin. ♂ ♀.

Head black, front with three sulphur-yellow lines, the middle one extending to the occiput; cheeks with a yellow line behind the eyes. Antennæ twice the length of the body in both sexes, pitchy black, bases of the fourth and sixth joints with pale grey rings. Thorax rather small, tumid on the sides in the middle, constricted near the base; purplish black, the sides each with

three transverse sulphur-coloured lines, one along the front margin extending to the upper surface, and two shorter, near the hind margin; there is also a short line above, in the middle of the fore margin, and a round spot in the middle, near the hind margin. Scutellum purplish. Elytra prominent at the shoulders, then gradually attenuated to near the apex, afterwards more quickly narrowed, apex truncated in a straight line, sutural angle simple, external angle produced into a short and acute tooth; surface clothed with strong erect bristles, each proceeding from a puncture, dark purplish, with a silky gloss; a small oblong spot on each side near the scutellum, and two larger, rounded, on the disk (one before, the other after, the middle) and a transverse spot at the apex sulphur-yellow. Body beneath blackish, clothed with grey pile and with an oblique stripe on each side of the breast, and a row of linear spots on each side of the abdomen, densely ashy tomentose. Legs pitchy red, ringed with ashy; fore tarsi simple in both sexes.

♂ Terminal abdominal segment moderately short, depressed, slightly narrowed towards the apex; both dorsal and ventral plates truncated and slightly emarginated.

♀ Terminal abdominal segment greatly elongated, tubular; ventral plate simply truncated, dorsal lanceolate, longer than the ventral.

This very beautiful little species occurred sparingly at Ega, on slender branches of trees in the forest*.

5. *Colobothea luctuosa*, Pascoe.

Colobothea luctuosa, Pascoe, Trans. Ent. Soc. Lond. v., n. s. i. 42.

“*C. nigra*; capite vittis tribus, prothorace quinque, elytris singulis duabus, una humerali altera medio-suturali, ochraceis, his fascia apicali, macula tertia terminali, antennarum articulis quarto sextoque basi, albis. Long. $4\frac{1}{2}$ lin. Pará.” Pascoe, *loc. cit.* ♂ ♀.

This elegant species is readily distinguishable from all others that I have seen, by its peculiar colouring. The thorax is tumid

* To this section of the genus belongs the following:—

Colobothea biguttata, n. sp. Parum elongata, convexa, postice a medio elytrorum declivis, grisea. Caput obscure griseum. Antennæ picæ, articulis basi griseis. Thorax lateribus longe ante basin tuberculatis, deinde angustatus, griseus, dorso fulvo quadrimaculatus. Elytra basi lata, humeris paulo obliquis, imprimis sensim, apices versus citius angustata, apicibus truncatis, angulis suturalibus obtusis exterioribus breviter spinosis; supra punctata, haud setosa, grisea, maculis rotundatis fulvis et altera pone medium majore et discoidali nigra ornata. Pedes rufescentes, tibiis tarsisque nigricantibus, his articulo primo griseo. Maris (?) segmento ultimo abdominali simplici obtuso Long. $4\frac{1}{2}$ lin. ♂ (?). *Hab.* in Brasilia, a Dom. Jekel sub nomine *C. biguttata* Dej. missa.

on the sides behind the middle, and constricted between that point and the base. The elytra are gradually attenuated from base to apex, and the latter is rather obliquely truncated, with the external angle alone produced into a spine. The scutellum is black, with a yellow spot at its tip. The apex of the elytra is ashy white, and there is also a white dot on the disk not far from the apex. Besides the yellow line on each extending from the base to the middle and the sutural streak, there is also a yellow dot near the suture, a short distance behind the scutellum. The white ring at the base of the sixth antennal joint is obsolete in the female. The body beneath is clothed with grey pile, and has an ochreous-ashy streak of denser pile on each side. The terminal antennal joints are much longer in the male than in the female, and there is but little sexual difference in the form of the terminal abdominal segment.

I met with the species at Ega on the Upper Amazons, and not at Pará, as erroneously recorded by Mr. Pascoe.

6. *Colobothea dioptica*, n. sp.

C. brevis, lata, convexa, brunnea, supra nullomodo setosa, thorace prope basin utrinque tuberculo acuto, deinde subiter angustato; elytris pone medium macula rotundata atro-velutina flavo cincta. Long. $4\frac{1}{2}$ lin. ♂ ♀.

Head black, vertex grey. Antennæ pitchy, bases of the middle joints slightly grey. Thorax widened from the front to near the hind margins, and each side forming at that point an acute prominence, after which it is suddenly narrowed to the base; surface brown, varied with indistinct lighter brown marks. Scutellum dark brown, with a central tawny-ashy spot. Elytra short, broad, and convex, shoulders forming a short and very prominent ridge, the lateral carina proceeding thence being scarcely elevated, and disappearing before the middle of the elytron; apex truncated in a slightly flexuous line, sutural angles rounded off, external angles produced into a short and broad tooth: surface free from setæ, brown, speckled with light tawny brown, and each elytron having, behind the middle, a large round velvety-black spot encircled with yellow. Body beneath black, clothed with grey pile; sides of abdomen spotted with grey; terminal segment shining black. Legs black or reddish, ringed with grey. Fore tarsi simple in both sexes.

♂. Terminal ventral segment deeply notched; dorsal broad and obtuse.

♀. Terminal ventral segment simply truncated; dorsal tapering and obtuse.

On slender dead twigs in the forest; Pará and banks of the Tapajos. Rare.

This species seems to resemble much in colours and shape *Priscilla hypsiomoides*, Thoms. (Systema Ceramb. p. 31); but the character he gives, "brunneo-setosa," does not at all suit, as our insect is one of the few *Colobothea*-forms which are destitute of setæ on the surface of the body.

§ II. Fore tarsi dilated and ciliated in the male.

a. Thorax tumid on each side behind the middle, or furnished with a tubercle: narrowed at the base.

7. *Colobothea pictilis*, n. sp.

C. elongata, postice modice augustata, grisea; thorace pone medium acute tuberculato, vitta latiore dorsali altera laterali lineolisque duabus utrinque intermediis nigris; elytris apice utrinque bidentatis, fulvo maculatis, fasciis duabus interruptis nigris. Long. $3\frac{1}{2}$ – $4\frac{1}{2}$ lin. ♂ ♀.

Head dusky grey, vertex with two ashy lines, diverging on the occiput. Antennæ black, bases of the joints grey. Thorax widest a little behind the middle, where a conical projection is formed on each side, behind constricted: surface grey, with a central vitta (unequal in width) and a lateral stripe, below the tubercles, black; there are also on each side of the upper surface two fine black lines, sometimes partially united. Scutellum black, with a central ashy spot. Elytra moderately elongated and attenuated, apex sinuate-truncate, sutural angles produced into a short tooth, external ones into an elongate spine; surface grey, sprinkled with tawny patchy spots; each elytron has besides two short angulated lateral fasciæ of a black colour, and more or less distinct indications of a third near the apex. Body beneath clothed with ashy tomentum; abdomen of the female spotted with black. Legs black, ringed with grey: fore tarsi moderately dilated and fringed in both sexes.

♂. Apical ventral segment greatly distorted, its surface forming an angular elevation with an elevated ridge on each side: the concavity thus formed shining black; the dorsal segment is notched in the middle. The middle segments of the abdomen are greatly contracted in the middle.

♀. Apical ventral segment with its terminal angles produced into long spines; dorsal segment broadly notched.

Pará, on branches of dead trees; rare.

8. *Colobothea pulchella*, n. sp.

C. parva, postice sensim attenuata, carneo-grisea; thorace pone medium prominulo angulato, deinde constricto, vitta dorsali (medio constricta) altera laterali lineolisque duabus utrinque intermediis nigris; elytris utrinque apice bidentatis, carneo maculatis, humeris,

fasciis duabus interruptis lituraque subapicali nigris. Long. 4 lin. ♂.

Head pinkish grey, occiput with two stripes and a posterior spot black. Antennæ pitchy black; bases of joints grey, those of sixth, eighth, and tenth joints whiter. Thorax widened behind the middle, and forming there an acute prominence, constricted behind. Surface pinkish grey, with a dorsal vitta (constricted behind the middle), a lateral stripe, and two fine lines on each side black. Scutellum black, with a minute grey spot at the base. Elytra gradually narrowed from base to apex, sinuate-truncate, with the sutural angles produced into a short, the external into a long tooth: surface sparingly clothed with fine setæ, punctured, grey, sprinkled with pinkish patchy spots, a short stripe under each shoulder (continuous with the lateral thoracic stripe), a very short streak proceeding from each angle of the scutellum, a spot on the disk near the base, a short fascia behind the middle, and a curved letter near the apex black. Body beneath grey. Legs grey, ringed with black: fore tarsi in the ♂ moderately dilated and fringed.

♂. Terminal ventral segment strongly elevated towards the tip, the elevation surmounted by a curved ridge, leaving a smooth concave space within; second segment strongly contracted in the middle.

Banks of the Tapajos; one example. This and the preceding species are closely related to a Venezuelan species of much larger size*.

9. *Colobothea obtusa*, n. sp.

C. modice elongata, postice attenuata, fusco-nigra, cinereo maculata; thorace brevi, pone medium parum tumidulo, deinde leviter con-

* *Colobothea lineola* (Chevrol. MS. sec. Dom. Deyrolle).—Elongata, postice sensim attenuata, grisea, fulvo nigroque variegata. Caput nigricans. Antennæ nigricantes articulis basi griseis. Thorax usque ad medium dilatatus, lateribus pone medium valde acute tuberculatis, deinde basin versus sinuato-attenuatus; supra griseus fulvo variegatus, medio vitta postice dilatata, altera laterali lineolisque duabus intermediis nigris. Scutellum postice angustatum, nigrum, macula grisea. Elytra gradatim attenuata, truncata, angulis suturalibus simplicibus, exterioribus valde productis, humeris prominulis parum obliquis; supra breviter setosa, punctata, grisea, punctis nigris maculisque carneo-griseis variegata, utrinque maculis angulatis tribus quarum una pone medium major. Corpus subtus cinereum: abdominis medio et lateribus nigro maculatis; segmento apicali nigro, basi cinereo maculato. Pedes cinerei, nigro annulati: tarsi anticis maris valde dilatatis et ciliatis. Maris segmentum ultimum ventrale simplex, late irregulariter truncatum, angulis haud productis; dorsale obtusum; foeminae segmentum ultimum ventrale angulis dentatis; dorsale magis attenuatum, apice breviter emarginatum. Long. $6\frac{1}{2}$ –8. ♂ ♀. *Hab.* Venezuela.

stricto; elytris apice sinuato-truncatis angulis haud productis. Long. $4\frac{1}{2}$ lin. ♂ ♀.

Head brown, vertex with one, forehead with two ashy stripes. Antennæ clothed with stiff setæ, pitchy black, base of the fifth joint with a white ring; in the male the base of the fourth joint is also ashy. Thorax short and rather rounded on the sides, slightly tumid not far from the base, and then gradually narrowed to the base: surface black, centre with two short lines in front and a longer line behind (pointing between the two short ones) ashy; the sides have each two ashy lines, besides the ashy stripe lying over the fore coxæ. Elytra moderately prominent at the shoulders, apex somewhat narrow and truncated in a slightly incurved line, with the angles not at all prominent; surface punctured and clothed with fine setæ, black, varied with a large number of ashy spots of an oblong or short linear form; apex white. Body beneath greyish. Legs pitchy, clothed with grey pile; femora with a grey central ring; tarsi grey, two terminal joints black: fore tarsi of the male strongly dilated and ciliated.

♂. Terminal ventral segment broadly truncated, angles produced into long spines; dorsal notched.

♀. Terminal ventral segment narrowed towards the tip, angles produced into spines; dorsal also narrowed, notched at the apex.

Eggs, on branches of dead trees. There is a handsome species in collections from Mexico, which much resembles *C. obtusa* in the form of the thorax*.

10. *Colobothea humerosa*, n. sp.

C. elongata, variegata, thorace tuberculis acutis lateralibus retrorsum spectantibus mox ante basin sitis; elytris humeris antice dilatatis, griseis, carneo maculatis, utrinque fasciis macularibus tribus nigris; pedibus carneo nigro griseoque variis. Long. $4\frac{1}{2}$ –6 lin. ♂ ♀.

Head blackish, forehead with three indistinct yellowish lines, vertex with two similar lines diverging on the occiput, cheeks striped with ashy ochreous. Antennæ pitchy, bases of the fourth

* *Colobothea leucophæa* (Chevrol. MS. sec. Dom. Deyrolle). Latiuscula, depressa, nigra, cinereo variegata. Caput nigrum, fronte cinereo obscure lineata, vertice vittis duabus cinereis postice divergentibus. Antennæ piceæ, articulis basi cinereis. Thorax brevis, lateribus rotundatis, ante basin tumidis, deinde constrictis; dorso nigro, medio vitta lata (lineola nigra includente) lateribusque maculis tribus cinereis. Scutellum triangulare, nigrum, cinereo marginatum. Elytra latiuscula, depressa, postice modice attenuata, truncata, angulis exterioribus spinosis; nigra, maculis cinereis confluentibus conspersa, relictis fasciis interruptis angulatis duabus nigris, una ante, altera pone medium. Corpus subtus dense cinereo tomentosum. Pedes cinerei, tibiis piceis cinereo annulatis, tarsis cinereis apice nigris. Fœminæ segmentum ultimum abdominale attenuatum; lamina ventrali longe bispinosa. Long. $6\frac{1}{2}$ lin. ♀. Hab. in Mexico.

and sixth joints grey, middle of the terminal joints grey. Thorax at first sight appearing to be gradually narrowed from base to apex; but the base itself is narrowed, and each side has an acute projection, pointed backwards, and nearly touching the humeral callus; surface with thirteen stripes alternately black and tawny, the central (black) stripe with a grey line down its middle. Scutellum black, streaked with grey. Elytra with the shoulders not advanced laterally but vertically and forward, so that the humeral ridge fits into the narrow space between the lateral tubercle and the base of the thorax; the surface is setose, punctured, and grey, with numerous pinkish marks which are chiefly collected round the black fasciæ; the latter are three in number—one, short, before the middle, the second, oblique and angular, behind the middle, and the third, quadrate, at the apex; the extreme apex is bordered with grey or pinkish, and is truncated, with the sutural angle simple, the external produced into a long spine. Body beneath greyish, sides with a stripe of fulvous tomentum, abdomen with the sides spotted in the middle. Legs grey, femora with a pinkish spot on their upper surface; tibiæ ringed with grey and black; tarsi black, with the two basal joints grey; fore tarsi of the male moderately dilated and fringed.

♂. Terminal ventral segment broadly emarginated, angles acute; dorsal narrowed to the tip, broadly notched.

♀. Terminal ventral segment broadly emarginated, with a pencil of stiff hairs proceeding from each angle; dorsal truncated.

Branches of dead trees, forest, Pará. In the colours of the elytra this species resembles *C. velutina*.

To this section of the genus belong also *C. pæcila*, Germar (Ins. Nov. p. 488), *C. subcincta*, Castelnau (Anim. Artic. ii. p. 491), *C. strigosa*, Mannerheim*, and *C. vidua* † (Chevrol. MS.);

* *C. strigosa* (Mannh. sec. Dom. Deyrolle). Elongata, postice paulo attenuata. Caput et antennæ rufescentia, hæ articulis basi pallidioribus. Thorax ante basin tuberculo conico instructus, deinde parum angustatus, dorso brunneo vittis quinque lateribusque nigris. Scutellum nigrum, macula grisea. Elytra brunnea, cinereo fulvoque varia, macula obliqua angulata ante medium, fascia valde undulata pone medium liturisque angulatis prope apicem nigris; apicibus sinuato-truncatis, angulis suturalibus paulo, exterioribus valde productis. Corpus subtus ochraceum, abdomine nigro maculato. Pedes rufescentes, cinereo annulati. Long. 7 lin. ♀. *Hab.* in Brazil.

† *C. vidua*. Minor, nigra, cinereo maculata. Caput nigrum, vertice lineolis duabus divergentibus cinereis. Antennæ nigrae, articulis basi griseis. Thorax angustior, lateribus pone medium tuberculo parvo armatis; niger, dorso vittis duabus maculam includentibus lineolaque laterali cinereis. Elytra nigra, cinereo sparsim maculata, apice truncata, angulis exterioribus productis. Corpus subtus cinereum. Pedes nigri, cinereo annulati. Long. 4½ lin. ♀. *Hab.* in Mexico.

the last mentioned from Mexico, the other two from Rio Janeiro. *C. Schmidtii** of French collections (Brazil) from the very slight, if any, narrowing of the thorax near the base, seems to stand on the confines of subsections *a* and *b*.

XXVI.—*On the Nomenclature of the Foraminifera.* By MESSRS. W. K. PARKER, F.Z.S., T. R. JONES, F.G.S., and H. B. BRADY, F.L.S., F.G.S.

Part XI.—*The Species enumerated by Batsch in 1791.*

IN order of priority the Foraminifera described and figured by Batsch should have been noticed next to those enumerated by Linnæus and Gmelin; but we had then had no opportunity of seeing his book, or otherwise of identifying the species named by him. The work, a copy of which we have been fortunate enough to secure, appears to be scarce, and consists mainly of a series of six beautiful and characteristic quarto copper-plates of minute sea-shells. The letterpress is confined to four quarto pages, one of which is occupied by the title. We propose to give a translation of the descriptions of the species, and to append to each such observations as appear necessary. Unlike the drawings given by nearly all the other earlier naturalists, those in Batsch's work leave no room for doubt as to the species for which they are intended; the specimens have been so carefully selected, and the figures are so beautifully drawn and so well engraved, that identification becomes an easy process. In addition to this, our author shows great judgment in putting together the varietal forms of the *Nodosaria* group, distinguishing them from the porcellanous-shelled *Peneroplides*. The whole of the figures are of Foraminifera (sixteen "*species*"); and of each form several drawings are given, together with minute outlines of the natural size. It is greatly to be regretted that we have no record of the locality whence the material containing the specimens figured was obtained, as one at least of the varietal forms of *Nodosaria* (No. III., *N. murex*) has not, so far as we know, been noticed by subsequent observers.

* *C. Schmidtii*. Elongata, postice attenuata. Caput obscure, vertice cinereo macula trigona nigra. Antennæ nigrae, articulis basi griseis. Thorax ante basin tuberculo parvo, deinde vix angustatus; dorso griseus, vittis quinque nigris, mediana latiore lineolam griseam includente. Elytra grisea, nigro punctata, maculis confluentibus ochraceo-cinereis conspersa, maculis majoribus vel fasciis tribus nigris, una (interdum obsoleta) ante medium, altera majore angulata pone medium, tertiaque prope apicem; apicibus sinuato-truncatis, angulis suturalibus prominulis, exterioribus productis. Pedes picei, cinereo annulati. Fœminæ segmentum ultimum dorsale attenuatum bifidum; maris emarginatum. Long. $7\frac{1}{2}$ lin. ♂ ♀. *Hab.* in Rio Janeiro, a Rev. Hamlet Clark lecta.